

## EAST Search History

| Ref # | Hits | Search Query       | DBs  | Default Operator | Plurals | Time Stamp       |
|-------|------|--------------------|--|------------------|---------|------------------|
| S1    | 1    | "0223792.3"        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND              | ON      | 2007/06/07 09:25 |
| S2    | 1690 | gorbunov.in.       | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND              | ON      | 2007/06/05 10:38 |
| S3    | 1    | gorbunov-boris.in. | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND              | ON      | 2007/06/05 10:40 |
| S4    | 2    | gorbunov-b.in.     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND              | ON      | 2007/06/05 10:40 |

## EAST Search History

|    |    |   |  |     |    |                  |
|----|----|---|--|-----|----|------------------|
| S5 | 50 | (US-20060071163-\$ or<br>US-20030210318-\$ or<br>US-20040134997-\$ or<br>US-20020176926-\$ or<br>US-20030180640-\$ or<br>US-20050151122-\$ or<br>US-20060244410-\$ or<br>US-20070051898-\$ or<br>US-20070062854-\$).did. or<br>(US-4150373-\$ or US-4447728-\$<br>or US-3710933-\$ or US-6205313-\$<br>or US-5937243-\$ or US-5089289-\$<br>or US-5288305-\$ or US-5413760-\$<br>or US-5902462-\$ or US-3779166-\$<br>or US-4006983-\$ or US-5078848-\$<br>or US-5826147-\$ or US-6054495-\$<br>or US-6440629-\$ or US-6458500-\$<br>or US-6781612-\$ or US-3656171-\$<br>or US-4538733-\$ or US-4780331-\$<br>or US-4841242-\$ or US-4908301-\$<br>or US-5021831-\$ or US-5370911-\$<br>or US-5439513-\$ or<br>US-5502348-\$).did. or<br>(US-6091068-\$ or US-6148272-\$<br>or US-6899854-\$ or US-3640246-\$<br>or US-4806829-\$ or US-4829178-\$<br>or US-4902898-\$ or US-5352899-\$<br>or US-5619034-\$ or US-5756994-\$<br>or US-6410915-\$ or US-6489622-\$<br>or US-6727497-\$ or US-6815671-\$<br>or US-6909086-\$).did. | US-PGPUB;<br>USPAT   | AND | ON | 2007/06/05 11:48 |
| S6 | 1  | "4383171".pn.   | US-PGPUB;<br>USPAT   | AND | ON | 2007/06/05 11:50 |
| S7 | 0  | EP-0692712-A.did.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 11:51 |
| S8 | 0  | EP-0692712-.did.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 11:50 |

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|     |        |   |  |     |    |                  |
|-----|--------|---|--|-----|----|------------------|
| S9  | 0      | EP-0692712-\$   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 11:50 |
| S10 | 0      | 0692712-\$  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 11:50 |
| S11 | 0      | EP-0692712-A  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 11:51 |
| S12 | 9      | US-4383171-\$.DID. OR<br>US-4588889-\$.DID. OR<br>US-5097124-\$.DID. OR<br>JP-2162251-\$.DID. OR<br>JP-61239186-\$.DID. OR<br>JP-61093544-\$.DID. | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT                           | AND | ON | 2007/06/07 15:58 |
| S13 | 861    | charge adj transfer\$4 mass adj<br>spectromet\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT                           | AND | ON | 2007/06/05 12:24 |
| S14 | 139882 | "250".clas.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT                           | AND | ON | 2007/06/05 12:25 |
| S15 | 255    | S14 S13   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT                           | AND | ON | 2007/06/05 12:26 |
| S16 | 8657   | 250/281,282,283,287,288,423R,<br>424,423F,423,489,492.21.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT                           | AND | ON | 2007/06/05 12:29 |

## EAST Search History

|     |        |  |  |     |    |                  |
|-----|--------|--|--|-----|----|------------------|
| S17 | 219    | S16 S13  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/05 12:29 |
| S18 | 219    | S17 charge near transfer\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/05 12:30 |
| S19 | 488054 | S17 uncharged or neutral   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/05 12:30 |
| S20 | 3      | S17 (uncharged or neutral) near transfer\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/05 12:40 |
| S21 | 4      | S17 (uncharged or neutral) near separat\$3   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/05 12:40 |
| S22 | 15     | ("3847115"   "4901667"   "5284544"   "5423936"   "5496410"   "5518572").PN. OR ("5811820").URPN. | US-PGPUB;<br>USPAT;<br>USOCR                     | AND | ON | 2007/06/05 13:39 |
| S23 | 28     | S17 aerosol  | US-PGPUB;<br>USPAT;<br>USOCR                     | AND | ON | 2007/06/05 13:46 |
| S24 | 1120   | S16 chemical adj (ionization or ionisation)  | US-PGPUB;<br>USPAT;<br>USOCR                     | AND | ON | 2007/06/05 13:47 |
| S25 | 143    | S24 aerosol  | US-PGPUB;<br>USPAT;<br>USOCR                     | AND | ON | 2007/06/05 13:47 |
| S26 | 58     | S25 counter  | US-PGPUB;<br>USPAT;<br>USOCR                     | AND | ON | 2007/06/05 13:48 |
| S27 | 33     | S26 mobility   | US-PGPUB;<br>USPAT;<br>USOCR                     | AND | ON | 2007/06/05 14:03 |
| S28 | 0      | "2002003210".pn.   | US-PGPUB;<br>USPAT;<br>USOCR                     | AND | ON | 2007/06/05 14:03 |

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|     |     |   |  |     |    |                  |
|-----|-----|---|--|-----|----|------------------|
| S29 | 0   | "2002003210-\$".pn.                     | US-PGPUB;<br>USPAT;<br>USOCR   | AND | ON | 2007/06/05 14:04 |
| S30 | 0   | "2002003210"                            | US-PGPUB;<br>USPAT;<br>USOCR   | AND | ON | 2007/06/05 14:04 |
| S31 | 0   | Marcus-kenneth.in.                      | US-PGPUB;<br>USPAT;<br>USOCR   | AND | ON | 2007/06/05 14:04 |
| S32 | 0   | Marcus-R.in.                            | US-PGPUB;<br>USPAT;<br>USOCR   | AND | ON | 2007/06/05 14:04 |
| S33 | 12  | Marcus-R-Kenneth.in.                    | US-PGPUB;<br>USPAT;<br>USOCR   | AND | ON | 2007/06/05 14:11 |
| S34 | 274 | chemical adj (ionization or ionisation) | FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB                                  | AND | ON | 2007/06/05 14:12 |
| S35 | 5   | S34 mobility                            | FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB                                  | AND | ON | 2007/06/05 14:15 |
| S36 | 0   | S16 ion adj count\$3                    | FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB                                  | AND | ON | 2007/06/05 14:15 |
| S37 | 267 | S16 ion adj count\$3                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 14:16 |
| S38 | 27  | S37 aerosol                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 14:21 |
| S39 | 35  | S16 ion adj counter                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 14:34 |

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|     |      |   |  |     |    |                  |
|-----|------|---|--|-----|----|------------------|
| S40 | 2    | "5128543".pn.                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 14:38 |
| S41 | 0    | S16 optical near ion near count\$3                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 14:38 |
| S42 | 0    | S16 optical near charged adj particle near count\$3 | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 14:39 |
| S43 | 0    | S16 optical near charged adj particle               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 14:39 |
| S44 | 2036 | S16 optical   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 14:39 |
| S45 | 551  | S44 charged adj particle                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 14:39 |
| S46 | 26   | S45 ion adj count\$3                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 15:06 |

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|     |     |                                   |  |     |    |                  |
|-----|-----|-----------------------------------|--|-----|----|------------------|
| S47 | 0   | S46 optical adj count\$3          | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 14:39 |
| S48 | 153 | charge adj transfer near particle | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 15:06 |
| S49 | 83  | S48 ion                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 15:06 |
| S50 | 6   | S49 count                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 15:06 |
| S51 | 0   | S49 S16                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 15:07 |
| S52 | 0   | S48 S16                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 15:11 |
| S53 | 2   | "6573510".pn.                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/05 15:11 |

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|     |      |  |  |     |    |                  |
|-----|------|--|--|-----|----|------------------|
| S54 | 7    | ("5309064"   "5352899"   "5670785"   "5977552"   "6107634").PN. OR ("6573510").URPN. | US-PGPUB; USPAT; USOCR                                   | AND | ON | 2007/06/05 15:17 |
| S55 | 7    | ("5309064"   "5352899"   "5670785"   "5977552"   "6107634").PN. OR ("6573510").URPN. | US-PGPUB; USPAT; USOCR                                   | AND | ON | 2007/06/06 13:28 |
| S56 | 0    | JP61-093544  | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/06/06 13:28 |
| S57 | 1    | JP61093544   | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/06/06 13:29 |
| S58 | 0    | JP61093544-A   | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/06/06 13:29 |
| S59 | 0    | Yoshikazu-kakita.in.   | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/06/06 13:29 |
| S60 | 2    | JP-61093544-\$.DID.  | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/06/06 13:30 |
| S61 | 8659 | 250/281,282,283,287,288,423R,<br>424,423F,423,489,492.21.ccls.                       | US-PGPUB; USPAT; USOCR; JPO; DERWENT                     | AND | ON | 2007/06/07 09:25 |

## EAST Search History

|     |      |  |  |     |    |                  |
|-----|------|--|--|-----|----|------------------|
| S62 | 2    | S61 nephelometer   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/07 09:26 |
| S63 | 1    | S61 aethelometer   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/07 09:27 |
| S64 | 12   | S61 cytometer  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/07 09:50 |
| S65 | 20   | charged adj particle and<br>(nephelometer or aethelometer) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/07 09:32 |
| S66 | 8    | S61 condensation ion near<br>count\$3                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2007/06/07 09:59 |
| S67 | 6601 | evaporator and aerosol                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT                           | AND | ON | 2007/06/07 15:58 |
| S68 | 1    | S67 and S61  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT                           | AND | ON | 2007/06/07 15:59 |
| S69 | 7    | aerosol near evaporator                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT                           | AND | ON | 2007/06/07 16:00 |

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|     |       |  |  |     |    |                  |
|-----|-------|--|--|-----|----|------------------|
| S70 | 39413 | evaporator condensat\$3  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/07 16:00 |
| S71 | 1488  | evaporator near condensat\$3   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/07 16:01 |
| S72 | 10    | S71 aerosol  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/07 16:03 |
| S73 | 0     | S71 near aerosol   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/07 16:03 |
| S74 | 2182  | S70 aerosol  | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/07 16:04 |
| S75 | 1380  | S74 sample   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/07 16:04 |
| S76 | 788   | S75 particle   | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT | AND | ON | 2007/06/07 16:04 |
| S77 | 10    | (US-20050109929-\$).did. or<br>(US-4383171-\$ or US-6573510-\$<br>or US-5811820-\$ or US-5128543-\$<br>or US-6895339-\$ or US-4378499-\$<br>or US-7081619-\$ or<br>US-6619063-\$).did. or<br>(JP-61093544-\$).did. | US-PGPUB;<br>USPAT;<br>JPO                       | AND | ON | 2008/01/04 09:22 |
| S78 | 2     | S77 atmospheric vacuum   | US-PGPUB;<br>USPAT;<br>JPO                       | AND | ON | 2008/01/04 09:26 |
| S79 | 1     | S77 atmospheric not vacuum   | US-PGPUB;<br>USPAT;<br>JPO                       | AND | ON | 2008/01/04 09:26 |

## EAST Search History

|     |      |  |  |     |    |                  |
|-----|------|--|--|-----|----|------------------|
| S80 | 8988 | 250/281,282,283,287,288,423R,<br>424,423F,423,489,492.21.ccls. | US-PGPUB;<br>USPAT;<br>USOCR;<br>JPO;<br>DERWENT                           | AND | ON | 2008/01/04 09:29 |
| S81 | 2406 | S80 atmospheric  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/01/04 09:29 |
| S82 | 879  | S81 count\$3   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/01/04 09:30 |
| S83 | 11   | S81 (individual\$3 or singl\$2) near<br>count\$3               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/01/04 09:30 |
| S84 | 2    | S80 optical adj particle adj counter                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/01/04 09:45 |